



Office of Childhood  
Office of Special Education  
January 2022

## **Annual Report on First Steps Infants Identified through the Newborn Hearing Screening Program**

## **Purpose**

Under the Newborn Hearing Screening law, RSMo 191.931, the Missouri Department of Elementary and Secondary Education shall “monitor the delivery of early intervention services to those infants identified by the newborn hearing screening program and report annually to the department of health and senior services.” Eligible infants are served by the Missouri First Steps Program under Part C of the Individuals with Disabilities Education Act (IDEA).

This report provides information related to the number of First Steps infants born in 2020 and identified with permanent hearing loss through the newborn hearing screening program.

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## **Infants Enrolled in the First Steps Program**

As of November 22, 2021, 117 infants born in 2020 were identified with hearing loss by the Department of Health and Senior Services (DHSS). It is important to note that the 117 infants included infants who received incomplete results or unknown types of loss based on what was reported to DHSS. Infants who were determined to be suffering from middle ear pathology (e.g., fluid in the middle ear from colds, ear infections) and who do not have a permanent hearing loss could be removed from the list at a later date based on updates received from audiologists.

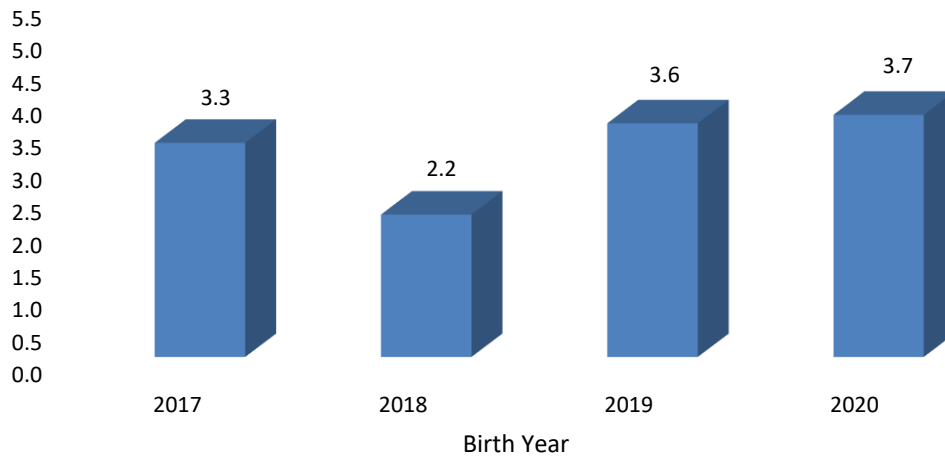
Of the 117 infants identified by DHSS, 109 (93.2%) were referred to the First Steps program. Of the 109 infants referred to First Steps, 88 (80.7%) were found eligible and had an Individualized Family Service Plan (IFSP). The remaining 21 infants did not reach IFSP status due to the following reasons: 12 children were withdrawn by a parent or guardian, eight children were unable to be located, and one child was deceased before reaching IFSP.

Of the 88 infants who had an IFSP, 77 (87.5%) were in active status as of November 22, 2021, seven children had been withdrawn by a parent or guardian, and four children were unable to be contacted/located.

## **Average Age at Referral**

Table 1 represents the average age in months of infants at the time of referral to First Steps for the 109 children referred. The average age at referral for infants born in 2020 was 3.7 months. The average age at the time of initial IFSP for the 88 infants who reached IFSP was 5.5 months.

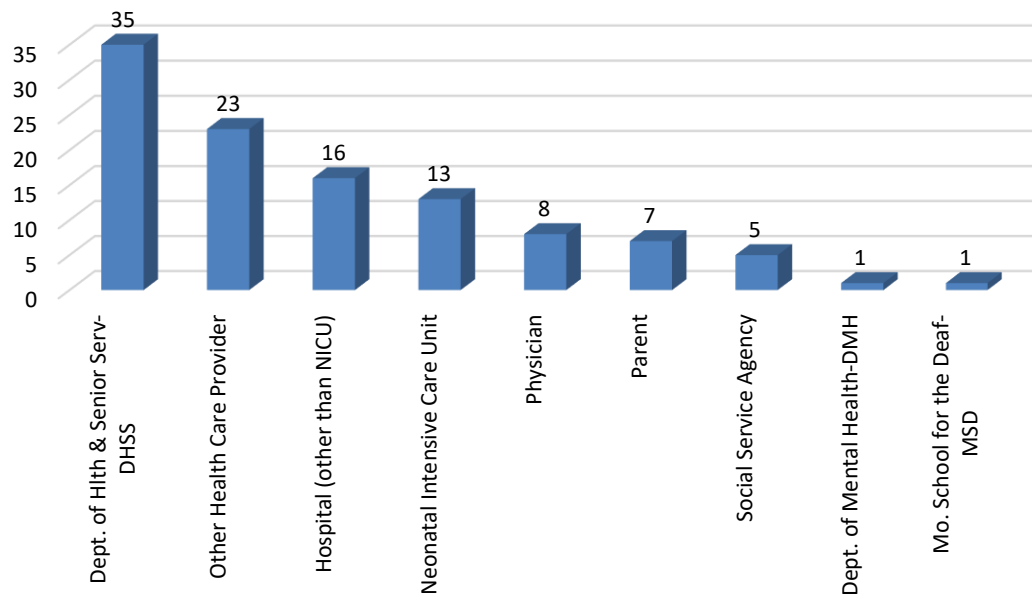
**Table 1. Average Age in Months at Referral**



### Referral Sources

Table 2 represents the sources of initial referrals to First Steps for infants with hearing loss identified by DHSS. Of the 109 infants referred to First Steps, most initial referrals were made by Department of Health and Senior Services (DHSS) with 35 (32.1%), Other Health Care Provider with 23 (21.1%), and Hospital (other than NICU) with 16 (14.7%).

**Table 2. First Steps Referral Sources**



## Eligibility Categories

Table 3 provides the primary First Steps eligibility category for the 88 infants determined eligible for services and reached IFSP. There were 76 children (86.4%) found eligible due to a diagnosed condition.

**Table 3. Reasons for Eligibility**

Reason for Eligibility	Number of Infants	% Eligibility
Diagnosed Condition	76	86.4%
Developmental Delay - Half age delay	6	6.8%
Newborn Condition	5	5.7%
Developmental Delay – Informed Clinical Opinion	1	1.1%
<b>Total</b>	<b>88</b>	<b>100.0%</b>

## Type of Hearing Loss

Table 4 represents the type of hearing loss and related First Steps referral and eligibility percentages for the 117 infants identified by DHSS. Of the 117 infants, 76 (65.0%) had a sensorineural hearing loss. Of the 76 infants with sensorineural hearing loss, 70 (92.1%) were referred to First Steps and, of those referred, 60 (85.7%) reached IFSP.

**Table 4. Type of Hearing Loss and First Steps Status**

Type of Loss	Number of Infants	Referred to First Steps	Reached IFSP	% Reached IFSP
Sensorineural	76	70	60	85.7%
Auditory Neuropathy	8	7	6	85.7%
Mixed	7	7	5	71.4%
Permanent Conductive	4	4	3	75.0%
Conductive	7	7	6	85.7%
Incomplete Testing and/or Unknown Type	15	14	8	57.1%
<b>Total</b>	<b>117</b>	<b>109</b>	<b>88</b>	<b>80.7%</b>

## Service Authorizations

Table 5 represents the First Steps service authorizations for the 77 infants identified by DHSS who were in active IFSP status as of November 22, 2021. There were 360 active authorizations for the 77 infants with hearing loss. The top three categories of First Steps service authorizations were:

- 1) 133 (36.9%) authorizations for Audiology;
- 2) 133 (36.9%) authorizations for Special Instruction ; and
- 3) 37 (10.3%) authorizations for Speech Language Pathology.

**Table 5. First Steps Authorizations**

	ABR: Audiology evoked potential	AT Service	Consultation/ Facilitation with Others	Direct Child Service	Evaluation/ Assessment	Family Education/ Training/Support	OAE limited: Evoked otoacoustic	Tympanometry (impedance testing)	Visual Reinforcement Audiometer	Grand Total	Percentage
Audiology	18	37	4	12	30	7	25			133	36.9%
Occupational Therapy			6	21						27	7.5%
Physical Therapy			10	20						30	8.3%
Special Instruction			28	57	39	9				133	36.9%
Speech Language Pathology			7	27		3				37	10.3%
<b>Grand Total</b>	<b>18</b>	<b>37</b>	<b>55</b>	<b>137</b>	<b>69</b>	<b>19</b>	<b>25</b>			<b>360</b>	<b>100.0%</b>

\* ABR – Auditory Brainstem Response

\* AT – Assistive Technology

\* OAE – Otoacoustic Emissions